A1 cont'd

OA3 74, Q3 transistor 76, R6 resistor 78, Q4 transistor 80, and R7 resistor 82. The R6 resistor 78 connects the emitter of Q3 transistor 76 to the Vcc supply potential applied to terminal 28. The OUT terminal of OA1 is now connected to both the base of Q1 transistor 32 and the base of Q3 transistor 76. The base and collector of Q4 transistor 80 are connected to the collector of Q3 transistor 76 via circuit lead 84 and to the (+) input of OA3 74 via circuit lead 86. The output terminal Out of OA3 74 is connected not only back to the (-) input thereof via circuit lead 88, but, more importantly, to the base of Q2 transistor 56 via circuit lead 90. The output of OA2 54 is also connected to the base of Q2 transistor 56 via circuit lead 92 as in the circuit Figure 1. Thus, the outputs of OA2 54 and OA3 74 are connected in parallel to the base of Q2 transistor 56. The latter comprises an important circuit element as will now become evident. It should be noted that in the preferred embodiment of the invention as shown in Figure 2, OA2 and OA3 are operational transconductance amplifiers.

<u>Page 7, lines 22 and 24</u>

A2

At rest or in an idle state where Idac is 0, both Q1 transistor 32 and Q3 transistor 76 are in a non-conductive state. This results in zero (Ibias=0) collector currents of Q1 and Q3 transistors 32 and 76. The OUT output terminal of OA2 connected to the base of Q2 transistor [54] <u>56</u> is at Vcc, but the base of Q2 is also connected in parallel to the output of OA3 74 whose output is equal to Vcc – Vbe of Q4 transistor 80. This is less than the output of OA2 54. Therefore, the voltage at base of Q2 transistor 56 is at a voltage Vcc, causing it to be non-conducting.